

CLAIMS

What is claimed is:

1. A solid detergent composition prepared by a process comprising mixing: (i) a gemini surfactant of the general formula (I);
$$R^1CH(OH)CHR^3(OCH_2CH_2)_nOCHR^4CH(OH)R^2 \quad (I)$$
wherein R^1 and R^2 , independent of one another, each represents an alk(en)yl radical having from 4 to 22 carbon atoms, R^3 and R^4 , independent of one another, each represents a hydrogen or an alk(en)yl radical having from 1 to 22 carbon atoms and n represents a number of from 5 to 400; and (ii) a carrier.
2. The solid detergent composition according to claim 1, wherein R^3 and R^4 each represent a hydrogen.
3. The solid detergent composition according to claim 1, wherein R^1 and R^2 , independent of one another, each represents a linear alkyl radical having from 10 to 16 carbon atoms.
4. The solid detergent composition according to claim 2, wherein R^1 and R^2 , independent of one another, each represents a linear alkyl radical having from 10 to 16 carbon atoms.
5. The solid detergent composition according to claim 1, wherein n represents a number of from 10 to 50.
6. The solid detergent composition according to claim 3, wherein n represents a number of from 10 to 50.
7. The solid detergent composition according to claim 4, wherein n represents a number of from 10 to 50.

8. The solid detergent composition according to claim 1, wherein R¹ and R² are the same.

9. The solid detergent composition according to claim 7, wherein R¹ and R² are the same.

10. The solid detergent composition according to claim 1, wherein the carrier comprises a component selected from the group consisting of zeolites, alkali metal sulfates, alkali metal phosphates, alkali metal carbonates, alkali metal hydrogencarbonates, alkali metal silicates, alkali metal citrates, celluloses, carboxymethylcelluloses, cyclodextrins, starches, starch degradation products, polyacrylates, and mixtures thereof.

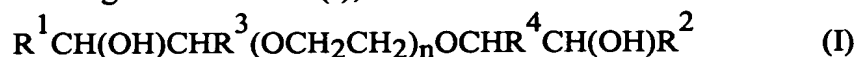
11. The solid detergent composition according to claim 1, wherein the carrier comprises an alkali metal phosphate.

12. The solid detergent composition according to claim 1, wherein the composition has a residual moisture of at most 10% by weight.

13. The solid detergent composition according to claim 1, wherein the gemini surfactant is present in an amount of from 6 to 75% by weight, and the carrier is present in an amount of from 25 to 94% by weight.

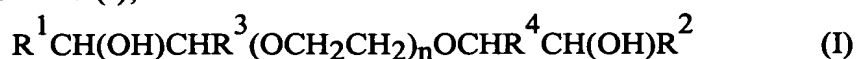
14. The solid detergent composition according to claim 1, wherein the gemini surfactant is present in an amount of from 10 to 40% by weight, and the carrier is present in an amount of from 50 to 80% by weight.

15. A solid detergent composition comprising: (i) a gemini surfactant of the general formula (I);



wherein R^1 and R^2 , independent of one another, each represents an alk(en)yl radical having from 4 to 22 carbon atoms, R^3 and R^4 , independent of one another, each represents a hydrogen or an alk(en)yl radical having from 1 to 22 carbon atoms and n represents a number of from 5 to 400; and (ii) a carrier; wherein the composition is a freeflowing, granular solid.

16. A process for the preparation of a solid detergent composition, said process comprising providing (i) a gemini surfactant of the general formula (I);



wherein R^1 and R^2 , independent of one another, each represents an alk(en)yl radical having from 4 to 22 carbon atoms, R^3 and R^4 , independent of one another, each represents a hydrogen or an alk(en)yl radical having from 1 to 22 carbon atoms and n represents a number of from 5 to 400, and (ii) a carrier; and combining the gemini surfactant and the carrier.

17. The process according to claim 16, wherein R^3 and R^4 each represent a hydrogen.

18. The process according to claim 16, wherein R^1 and R^2 , independent of one another, each represents a linear alkyl radical having from 10 to 16 carbon atoms.

19. The process according to claim 16, wherein n represents a number of from 10 to 50.

20. The process according to claim 16, wherein R^1 and R^2 are the same.

21. The process according to claim 16, wherein the carrier comprises a component selected from the group consisting of zeolites, alkali metal

sulfates, alkali metal phosphates, alkali metal carbonates, alkali metal hydrogencarbonates, alkali metal silicates, alkali metal citrates, celluloses, carboxymethylcelluloses, cyclodextrins, starches, starch degradation products, polyacrylates, and mixtures thereof.

22. The process according to claim 16, wherein the carrier comprises an alkali metal phosphate.

23. The process according to claim 16, wherein from 6 to 75% by weight of the gemini surfactant is combined with from 25 to 94% by weight of the carrier.